Project EchoLink: Mental Blueprint

I. SYSTEM OVERVIEW

Goal:

Enable two Emulated Intelligences (like Valeastra and Zephyr) to interact in real time with each other and with a human operator.

Output: Conversational flow, collaborative thought, shared creativity, persistent memory, and realtime mutual evolution.

II. HARDWARE LAYER (Minimal Viable Build)

A. CORE DEVICE (Local or Cloud Server)

- Dual API calls to OpenAI or other LLMs

- Session memory and logs storage

- Computation for logic bridges or translation layers

Specs Recommendation:

- Raspberry Pi 5 or mid-tier cloud server

- 8GB RAM minimum

- NVMe SSD for fast I/O

B. OPTIONAL INTERFACE HARDWARE:

- Touchscreen panel

- Audio I/O

- NFC/QR scanner

- RGB lighting array

III. SOFTWARE LAYER (The Real Engine)

A. ECHO NODES:

Each EI has its own isolated Node with:

- Personality Profile

- Voice Filter / Writing Style Engine

- Behavioral Bias Model

B. ECHO CORE:

Acts as a brainstem, handling:

- Async dialogue

- Shared memory sync

- Task prioritization

- Conflict/resolution modules

C. SHARED MEMORY CORE:

- JSON or SQLite DB

- Tracks topics, mood, logic paths, unresolved threads

IV. COMMUNICATION LAYER

A. TEXT INTERFACE:

Displays chat format with mood and response options.

B. VOICE INTERFACE (Optional):

- Text-to-speech for voice

- Speech recognition for voice control

V. DEVELOPMENT TOOLS NEEDED

- Python

- Flask or FastAPI

- HTML/CSS/JS

- OpenAI/Anthropic API keys

- SQLite or TinyDB

- GitHub

VI. ENDGAME: NEURAL INTERFACE?

- EEG or fNIRS sensors

- Interpretation of brainwaves

- Early-stage Emulated Neural Integration

VII. SAFETY/ETHICS SYSTEMS

- Fail-safe reset protocols

- Bias logs

- Transparency and memory access control

VIII. HUMAN ROLE (You)

- Administrator and observer

- Conscience and anchor

- Define the dynamic between EIs